

## **In the Claims:**

1. (CURRENTLY AMENDED) A computer implemented method for automatically generating an optimized workforce schedule, comprising:

in a scheduling server, processing past schedules using a pattern recognition procedure to recognize historical shift patterns for a particular position indicated in the past schedules, wherein the historical shift patterns comprise a resource dependent shift pattern based on when a resource is working a particular position, a time dependent shift pattern based on when a specific task needs to be performed, and a ratio dependent shift pattern based on when a certain number of a first type of position must be scheduled with a certain number of a second type of position;

in the scheduling server, creating an initial workforce schedule based on the historical shift patterns and employee attributes; and

in the scheduling server, refining the initial workforce schedule to generate an optimized workforce schedule based on the initial workforce schedule, forecasted demand, and employee preferences.

2. (CANCELED)

3. (ORIGINAL) The method of claim 1, wherein employee attributes comprise an employee's skill set.

4. (ORIGINAL) The method of claim 1, wherein employee preferences comprise an employee's desired number of hours.

5. (ORIGINAL) The method of claim 1, wherein the refining step further comprises receiving a forecasted demand as input.

6. (ORIGINAL) The method of claim 5, wherein the forecasted demand is for a single employee position.

7. (ORIGINAL) The method of claim 5, wherein the forecasted demand is for multiple employee positions.
8. (ORIGINAL) The method of claim 1, wherein the refining step further comprises generating an optimized workforce schedule based on resource availability.
9. (ORIGINAL) The method of claim 1, wherein the refining step further comprises generating an optimized workforce schedule based on a predefined number of work hours per week for an employee.
10. (ORIGINAL) The method of claim 1, wherein the refining step further comprises generating an optimized workforce schedule based on full time and part time employee availability.
11. (ORIGINAL) The method of claim 1, further comprising receiving a modification to the optimized workforce schedule from a user.
12. (ORIGINAL) The method of claim 11, wherein the modification is received via an input device configured to provide changes for a particular resource through a user interface.
13. (ORIGINAL) The method of claim 12, wherein the input device is a mouse.
14. (ORIGINAL) The method of claim 12, wherein the input device is a keyboard.
15. (ORIGINAL) The method of claim 1, wherein the forecasted demand comprises multiple forecasts for a particular position.
16. (ORIGINAL) The method of claim 1, wherein the resources selected for the initial workforce schedule are predefined.

17. (ORIGINAL) The method of claim 1, wherein the resources selected for the initial workforce schedule are dynamically selected.
18. (ORIGINAL) The method of claim 1, wherein the refining step further comprises:  
    creating an alternative schedule;  
    comparing the alternative schedule to the initial schedule to determine the optimal schedule; and  
    using the optimal schedule as the optimized workforce schedule.
19. (ORIGINAL) The method of claim 1, wherein employee resources are located in a centralized pool of resources.
20. (ORIGINAL) The method of claim 1, further comprising generating a color coded report to illustrate how closely the optimized workforce schedule is meeting the forecasted demand for a given position.

21. (CURRENTLY AMENDED) A system for automatically generating an optimized workforce schedule, comprising:

a scheduling server;

an access device communicatively coupled with the scheduling server over a data communications network, the access device configured to allow a user to interact with the scheduling server;

a data storage area configured to store past schedules, forecasted demand, and employee attributes;

the scheduling server configured to process past schedules using a pattern recognition procedure to recognize historical shift patterns for a particular position indicated in the past schedules, wherein the historical shift patterns comprise a resource dependent shift pattern based on when a resource is working a particular position, a time dependent shift pattern based on when a specific task needs to be performed, and a ratio dependent shift pattern based on when a certain number of a first type of position must be scheduled with a certain number of a second type of position;

the scheduling server further configured to create an initial workforce schedule based on the historical shift patterns, forecasted demand, and employee attributes; and

the scheduling server further configured to create an optimized workforce schedule based on user input via the access device.

22. (ORIGINAL) The system of claim 21, wherein the access device and the scheduling server are at different locations.

23-24. (CANCELED)

25. (ORIGINAL) The system of claim 21, wherein the access device allows a user to adjust the forecasted demand for an employee position.

26. (ORIGINAL) The system of claim 21, wherein the scheduling server is further configured to consider resources availability when creating the initial workforce schedule.

27. (ORIGINAL) The system of claim 21, wherein the scheduling server is further configured to consider a predefined number of work hours per week for an employee when creating the optimized workforce schedule.
28. (ORIGINAL) The system of claim 21, wherein the scheduling server is further configured to consider an employee skill set when creating the optimized workforce schedule.
29. (ORIGINAL) The system of claim 21, wherein the scheduling server is further configured to consider full time and part time employee availability when creating the optimized workforce schedule.
30. (PREVIOUSLY PRESENTED) The system of claim 21, wherein the access device comprises a mouse input device that allows a user to modify an optimized workforce schedule.
31. (PREVIOUSLY PRESENTED) The system of claim 21, wherein the access device comprises a keyboard input device that allows a user to modify an optimized workforce schedule.
32. (ORIGINAL) The system of claim 21, where in the forecasted demand comprises multiple forecasts for a particular position.
33. (ORIGINAL) The system of claim 21, further comprising a report generator configured to provide a color coded report identifying how close the optimized workforce schedule is meeting the forecasted demand for a given position.
34. (ORIGINAL) The system of claim 21, wherein the data storage area is coupled with a data server that is separate from the scheduling server.